

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
04 April 2024 (04.04.2024)



(10) International Publication Number
WO 2024/069483 A1

(51) International Patent Classification:
B29D 11/00 (2006.01)

(21) International Application Number:
PCT/IB2023/059627

(22) International Filing Date:
27 September 2023 (27.09.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/410,654 28 September 2022 (28.09.2022) US

(71) Applicant: **ALCON INC.** [CH/CH]; Rue Louis-D'Affry 6,
1701 Fribourg (CH).

(72) Inventors: **ICENOGLE, David Andrew**; c/o Alcon Research, LLC, 11460 Johns Creek Parkway, Johns Creek, Georgia 30097 (US). **LINDACHER, Joseph Michael**; c/o Alcon Research, LLC, 11460 Johns Creek Parkway, Johns Creek, Georgia 30097 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(54) Title: SYSTEM AND METHOD TO MANUFACTURE A CONTACT LENS WITH AN EMBEDDED ELEMENT

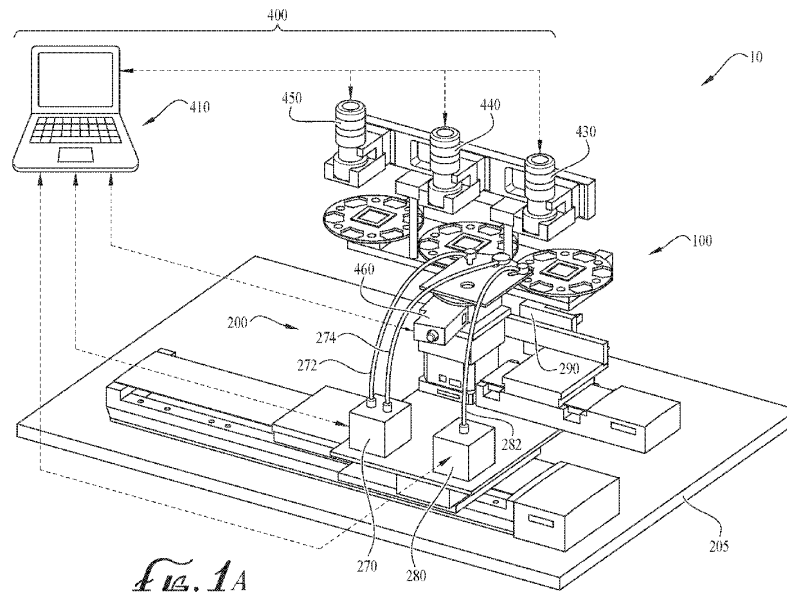


Fig. 1A

(57) Abstract: A system and method for automated production of a hybrid lens product comprising a lens insert embedded within a lens body. The system preferably includes a first carrier for holding at least one first mold half, a second carrier for holding at least one lens insert, and a third carrier for holding at least one second mold half. The system preferably also includes an automated movement enabling pick-and-place subassembly for positioning a lens insert within a first mold half, and for engaging a second mold half with a first mold half.

[Continued on next page]

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*